Review of the Methyl Bromide Critical Use Exemption (CUE) process under the Montreal Protocol

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Mr. Chairman, Members of the Subcommittee, thank you for the opportunity to deliver this methyl bromide statement on behalf of three federal agencies -- the Department of State, the Department of Agriculture, and the Environmental Protection Agency. We realize that methyl bromide, and its phase out under the Clean Air Act and Montreal Protocol are issues of great importance to many of you and your constituents. While the focus of your hearing is on methyl bromide, I would like to begin by providing a brief overview of our ongoing efforts to protect the ozone layer under the Clean Air Act (CAA) and the Montreal Protocol.

Since the Montreal Protocol's inception in 1987, the United States has exerted strong global leadership in making the transition away from ozone-depleting substances and toward the development of new technologies that are safe for the ozone layer. The United States continues not only to meet all of its obligations under the Montreal Protocol, but, in fact, has already phased out the consumption of nearly 97% of all ozone-depleting substances controlled by the Montreal Protocol. Because of the U.S. Government's commitment and our innovative domestic industries, the world is well on its way to seeing the recovery of the stratospheric ozone layer.

A major goal of both the Montreal Protocol and the Clean Air Act is to protect public health from harmful UV radiation. We are clearly moving in the right direction. In fact, the legislative evaluation required by the Clean Air Act's section 812 estimated that full implementation of the Montreal Protocol will save 6.3 million U.S. lives from skin cancer between 1990 and 2165. And, we are working with groups like the American Academy of Dermatology and the National Council for Skin Cancer Prevention in education programs like SunWise Schools to further reduce risks of skin cancer,

especially for kids. The Cancer Research and Prevention Foundation's Congressional Families Action for Cancer Awareness recognized the importance of EPA's sun safety programs in 2003. Because skin cancer, a preventable disease, kills one American every hour, it is the government's obligation to both provide the public with information to mitigate the impacts of sun exposure and control the chemicals that damage the stratospheric ozone layer.

Our great successes do not mean that our task is done. In fact, the 2002 Scientific Assessment of Ozone Depletion, a comprehensive overview of the state of the ozone layer involving the work of hundreds of atmospheric scientists, life scientists, and researchers worldwide, with significant U.S. participation, found that the ozone layer is susceptible to damage because stratospheric concentrations of ozone-depleting chlorine is at or near its peak, while bromine, although still increasing, may peak over the next several years. In addition, seasonal damage to the ozone layer resulting in the 'ozone hole' in the Antarctic continues; in the 2003 season the hole reached its second largest extent, covering an area roughly the size of North America. Ultimate recovery of the ozone layer - and the consolidation of all the gains made so far - depends on our will, and that of the global community of Parties to the Montreal Protocol, to finish the job.

Staying the course matters to public health and to the ozone layer, but it also matters to the many businesses who took the risk of investing heavily in alternatives that do not damage the ozone layer. This substantial financial commitment by companies has generated an estimated $10 billion dollar business in trade with ozone-safe American products and technologies that could be at risk if the United States were to take action inconsistent with its commitments under the Montreal Protocol. For all of these reasons, this Administration remains committed to finishing the job of restoring and protecting the ozone layer, which was started by President Ronald Reagan.

That brings us to the topic of today's hearing, methyl bromide. We know a number of things about this chemical. First, it is a widely used biocide that is highly effective in killing pests that are of concern to agricultural interests in the United States and many other countries. Second, the United States has been the world's largest producer and consumer of this substance. Third, methyl bromide has been in wide use in the United States for decades, and users find it efficacious and are using it efficiently. Fourth, while there are alternatives available today for many uses in many situations, there is no alternative that can operate as effectively as methyl bromide in all the crop situations where methyl bromide is used.

A brief history is necessary to understand methyl bromide's current regulatory status under the Clean Air Act. The 1990 Clean Air Act required EPA to phase out the production and import of any newly identified substance with a significant potential to damage the ozone layer within seven years of listing the substance, without exceptions or exemptions. In 1991, the EPA received a petition to list methyl bromide and promulgated a rule which established a U.S. phase out date of 2001. In an effort to address both the environmental concern and an agricultural concern that a unilateral U.S. phase out in 2001 would put the United States at a disadvantage relative to other

developed nations that are agricultural competitors of the U.S., successive U.S. delegations to the Montreal Protocol pushed the global community to adopt the U.S. phase out date of 2001. In 1997, the United States succeeded in moving developed countries from their initial agreement to simply freeze production and import at historic levels to a phase out of methyl bromide in 2005, with exemptions and interim reductions in 1999, 2001, and 2003. Given that progress, and the desirability of ensuring harmonized requirements, Congress moved to amend the CAA in 1998 to conform the U.S. phase out schedule with that faced by other developed country Parties to the Montreal Protocol, resulting in the phase out schedule we have today. This schedule called for a freeze in methyl bromide production and consumption for developed countries in 1995, a 25% reduction by 1999, a 50% reduction by 2001, a 70% reduction by 2003, and a full phase out by 2005, subject to certain exemptions.

Users have made and are continuing to make progress in reducing the use of methyl bromide, in fulfillment of our obligations under the Montreal Protocol, by using newly approved substitutes and implementing innovative new technologies and practices. Under the U.S. Department of Agriculture's (USDA) Methyl Bromide Alternatives Program (Methyl Bromide Alternatives at http://www.nps.ars.usda.gov), agricultural and forestry leaders from private industry, academia, state, and federal agencies have come together to develop viable alternatives to methyl bromide. This research program has taken into account input from federal agencies as well as extensive private sector research and trial demonstrations of alternatives to assess the problem, formulate priorities, and implement state-of-the-art research.

From 1993 through 2004, the USDA Agricultural Research Service has spent approximately $172 million in an aggressive research program to find alternatives to methyl bromide. Through the Cooperative State Research, Education, and Extension Service, USDA has provided an additional $19.7 million since 1993 to state universities for methyl bromide replacement research and education. These federally supported research activities are in addition to extensive private sector efforts.

Nearly 80 percent of pre-plant methyl bromide soil fumigation use is in a limited number of crops. Much of the federal government's pre-plant effort has focused on strawberries, tomatoes, ornamentals, peppers, and nursery crops, (forest, ornamental, strawberry, pepper, tree, and vine), with special emphasis on tomatoes in Florida and strawberries in California as model crops. Methyl bromide users have contributed field plots, plant material, and equipment for research trials on potential alternatives.

At the same time, innovative U.S. technologies and practices allow our growers to make the methyl bromide we do use go as far as possible toward controlling key pests. The reductions in U.S. consumption over the past few years have been successfully accomplished in part because manufacturers and users have found that it is possible to dilute methyl bromide with other pest-control compounds, like chloropicrin, use barrier films, and lower rates of methyl bromide and still obtain effective pest control.

Another important area of emphasis is our responsibility to help identify, register, and implement safe and effective alternatives. Understanding the importance of this in the phase out of methyl bromide, EPA has since 1997 made the registration of alternatives to methyl bromide its highest registration priority. Even under the new "fee-for-service" system, EPA is committed to giving methyl bromide alternatives priority. As one incentive for the pesticide industry to develop alternatives to methyl bromide, EPA has worked to reduce the burden of data generation to the extent feasible while still ensuring that the Agency's registration decisions meet Federal safety standards. Where appropriate from a scientific standpoint, EPA has refined the data requirements for a given pesticide application, thus facilitating the research and development process for methyl bromide alternatives. Furthermore, EPA scientists routinely meet with prospective methyl bromide alternative applicants, counseling them through the pre-registration process to increase the probability that the data are collected and submitted correctly for the first time, thus minimizing delays.

Our efforts have paid off in some areas. Since 1997, EPA has registered a number of chemical/use combinations as part of its commitment to expedite the review of methyl bromide alternatives. While there is no silver bullet among them, they are nonetheless an important part of our overall methyl bromide strategy. They include:

2000: Phosphine to control insects in stored commodities;

2001: Indian Meal Moth Granulosis Virus to control Indian meal moth in stored grains

2001: Terrazole to control pathogens in tobacco float beds

2001: Telone applied through drip irrigation - all crops

2002: Halosulfuron-methyl to control weeds in melons and tomatoes

2003: Trifloxysulfuron sodium as an herbicide for tomato transplants in Florida and Georgia

2004: Fosthiazate as a pre-plant nematocide for tomatoes

2004: Sulfuryl fluoride as a post-harvest fumigant for stored commodities

In addition, EPA is currently reviewing several applications for registration as methyl bromide alternatives, including iodomethane as a pre-plant soil fumigant for various crops, and dazomet as a pre-plant soil fumigant for strawberries and tomatoes. While these activities are promising, environmental and health issues with alternatives must be carefully considered to ensure we are not just trading one environmental problem for another. As required by federal pesticide laws, including the Food Quality Protection Act, EPA is currently conducting tolerance reassessment and reregistration of methyl bromide to ensure that its registered uses meet today's health and safety standards. To facilitate this review, EPA expects to release the preliminary risk assessment for methyl bromide and other soil fumigants this May for public review and comment. Because soil fumigants are used in similar ways and present potential risks from similar paths of exposure, it makes sense to review the fumigants together rather than on separate time schedules. This process will assure a balanced, comprehensive and transparent evaluation of the risks and benefits of all fumigation options.

While we continue our domestic programs to facilitate the phase out of methyl bromide, the Parties to the Montreal Protocol recognized that widespread use and the difficulty of finding feasible alternatives to methyl bromide made its phase out more difficult than other chemicals controlled in the past under the Montreal Protocol. Accordingly, the Parties to the Montreal Protocol created three types of exemptions for methyl bromide.

First, the Parties recognized that methyl bromide is vitally needed in trade to ensure that shipments do not contain harmful and invasive pests that could be transported with commodities and introduced into new areas. Thus, they provided an exemption for quarantine and preshipment uses. As a consequence, while countries have committed to find alternatives and to limit the emissions and use of methyl bromide to those applications where its use is necessary, the production and import for these uses can continue during and after the phase out. On January 2, 2003, EPA published the Final Rule fully activating this exemption.

The second methyl bromide exemption, covering emergency situations, is an exemption from the phase out for the production or import of 20 metric tons of methyl bromide per event. This exemption can be activated by a Party to address what it considers to be an emergency. The real possibility of emergency needs that cannot be anticipated, like anthrax contamination, makes it especially vital for countries to have the flexibility to make methyl bromide rapidly available for such needs.

Third, the Parties created the critical use exemption (CUE), which is in some ways similar to the other safety valve available under the Montreal Protocol for CFCs, the essential use exemption. The Protocol's criteria allow any developed country that is a Party to the Protocol to seek an exemption from the phase out if it determines that the absence of methyl bromide would cause a significant market disruption. The Parties must agree that the nominating Party has demonstrated that there are no technically and economically feasible alternatives for the use in the context of the application and that the Party continues to make efforts to find alternatives for the use and to limit emissions. I want to focus on this exemption today.

The United States was one of 17 countries that have submitted nominations for critical use exemption. Some national requests were very small, covering only one use, and some were large, covering 10 or more uses. The amount of methyl bromide nominated by the United States for these uses was 9,920,965 kilograms for 2005, 9,722,546 kilograms for 2006, and 7,398,900 kilograms for 2007 - this translates into 39%, 37%, and 29% respectively of our 1991 baseline level for methyl bromide uses.

Each of these annual nominations was developed through a rigorous technical process involving the careful efforts of many technical experts. For the most recent 2007 nomination, for example, EPA's Office of Pesticide Programs, with collaboration from the USDA, worked intensively with growers to fully understand genuine critical needs in various states and agricultural sectors. This allowed EPA's and USDA's expert scientific and economic staff to develop technically supported estimates for U.S. critical needs for

methyl bromide in 2007 which were then shared with policymakers through an interagency process involving the State Department, USDA, EPA, and the Council on Environmental Quality. Each year the technical estimate has been lower than the previous year because parts of some sectors switch to alternatives, some sectors drop out altogether if they do not need the exemption, and because we obtain better information that allows us to more accurately estimate the true need for methyl bromide.

The value of this careful and collaborative consensus-building process has been demonstrated in our consistent success thus far with the Parties, who have approved the vast majority of each annual CUE request submitted by the U.S. so far. Specifically, Parties to the Protocol approved more than 90% of our request for 2005, amounting to slightly over 37% of baseline consumption. With respect to 2006, the Parties have approved the U.S. request to produce and import a total of 27% of the 1991 baseline consumption of methyl bromide, or about 6,900 metric tons for 2006. In addition, the Parties granted interim approval for the balance of the U.S. request for 2006, which represents almost 10% of the baseline amount. Final decisions on this increment will be made at an Extraordinary Meeting of the Parties to be held July 1, 2005 in conjunction with the Protocol's annual preparatory meeting. Similar decisions were made for the 15 other countries requesting CUEs for 2006.

It was clear at the meeting that the CUE process, involving literally hundreds of individual crops and users in seventeen countries, presents an unusually difficult challenge for the Methyl Bromide Technical Options Committee (MBTOC). With strong support from the United States, the Parties took steps in 2004 to address this challenge by adopting Decision XVI/4 to provide clear guidance to the MBTOC in their review of CUE nominations. The United States welcomes these improvements and believes these new guidelines will ensure that MBTOC reviews fully consider the relevant technical and economic criteria contained in Montreal Protocol decisions and transparently describe the basis for their judgments. The revised guidelines also allow for more extensive and direct communication between the MBTOC and the nominating Party, and will provide additional time after MBTOC makes a recommendation for a Party to appeal the decision.

We also support the so-called multi-year approach which would provide benefits in terms of time savings for the MBTOC and the Montreal Protocol Parties reviewing CUE nominations, as well as for the Parties that have to develop them. A multi-year approach would allow MBTOC to approve CUEs for several years at one time, thus providing greater predictability for the user community. In November 2004, the Parties agreed to elements related to multiple-year CUEs, and we are pleased that this issue will continue to be discussed at future Meetings of the Parties.

Mr. Chairman, I hope my testimony demonstrates that the Administration takes action on methyl bromide in a manner that protects public health, while still ensuring the critical needs of our farmers are met. The agreements reached on methyl bromide at the recent Meetings of the Parties demonstrate the continued vitality of the Montreal Protocol and the ability of the Parties to adapt to changing scientific and technical information. Although we still have more work to do, we believe we have fostered a greater

understanding and appreciation of the technical and economic basis for the U.S. CUE request. The U.S. position at the Prague Meeting of the Parties demonstrated the strong continued support for the Montreal Protocol as well as our firm commitment to phase out methyl bromide once technically and economically feasible alternatives are available for our agriculture sector.

I thank you for this opportunity to testify before this Committee on behalf of the Department of State, the Department of Agriculture and the Environmental Protection Agency. My colleagues and I would be pleased to answer any questions you may have.